ABSTRACT OF THE DISCLOSURE

The present invention increases the detection accuracy of each of a first to a third steps of cell search to reduce the time required for detecting correct frame boundaries and scramble code. A mobile station inputs a received signal to a matched filter corresponding to a primary synchronization code PSC, and a multi-slot averaging section executes averaging over a plurality of slots in order to reduce the adverse effects of noise and interference. After the averaging over the plurality of slots, a multi-search averaging section further executes averaging over a plurality of searches. Subsequently, a peak detector selects a timing with which an average correlation value is largest, to detect slot boundaries.